

Phoenix MSA, announced that it finished the third quarter of 2008 with more than 2.6 million lines in service.⁴⁸ Numerous other companies also offer VoIP services in the Phoenix MSA, including 1TouchTone.com, Lingo, myPhoneCompany, Net2Phone, Packet8, Verizon VoiceWing, VoIP.com, Magic Jack and many others.⁴⁹ All of these providers offer services with abundant features and unlimited long distance service for prices that are lower than the price of Qwest's Choice Home offerings.

28. VoIP-based telephone service is available to any mass market customer in the Phoenix MSA that has high-speed broadband internet access.⁵⁰ According to the Commission, broadband access lines in Arizona have grown from 248,172 in December 2001 to 2,578,548 in December 2007—an increase of over 930 percent.⁵¹ In fact, broadband access lines in Arizona increased by from 1,832,564 to 2,578,548—an *increase of more than 40%-- over the twelve months of 2007 alone*.⁵² According to the Commission, as of December 2007, there were 436,857 ADSL connections, 896,746 cable modem connections and 1,244,945 “other” high speed connections (e.g., wireless and satellite) in Arizona.⁵³ Thus, competitive broadband services are now widely available from multiple providers in the Phoenix MSA, and the connections have been embraced by a rapidly increasing number of customers. Each broadband connection represents an existing or potential VoIP subscriber.

⁴⁸ Vonage Press release, 11-6-08, see:

http://files.shareholder.com/downloads/VAGE/256201011x0x247533/6dd8cb96-f536-405b-9681-cd84817d8db3/VG_News_2008_11_6_Financial.pdf

⁴⁹ See: <http://www.voip-info.org/wiki/view/VOIP+Service+Providers+Residential#NorthAmerica>

⁵⁰ Broadband internet access is now available from a number of sources, including cable modem service, digital subscriber line, wireless broadband and satellite.

⁵¹ *High Speed Services for Internet Access: Status as of December 31, 2007*, FCC Industry Analysis and Technology Division, Wireline Competition Bureau, January 2009, Table 10.

⁵² *Id.*

⁵³ *Id.*, Tables 10, 11 and 12.

29. Some parties contend that VoIP service is significantly more expensive than traditional landline service because a broadband connection is required. However, this contention is based on the faulty premise that a customer purchases broadband service solely to facilitate VoIP. In fact, most customers purchase broadband services primarily for internet access and entertainment purposes, not simply to facilitate VoIP. For these customers, there is no incremental cost for broadband when they elect to add VoIP telephone service via the preexisting broadband internet connection, and the cost of broadband is therefore not a factor in their VoIP purchase decision.

30. Qwest DSL service subscribers have the option of utilizing their DSL connection to subscribe to VoIP service, in lieu of traditional Qwest local exchange services. Residential and business customers within Qwest's service territory may subscribe to Qwest DSL service on a "stand-alone" basis (i.e., they are not required to subscribe to standard Qwest local exchange service as a precondition to subscribing to Qwest DSL service). These customers may order VoIP telephone service from a wide range of non-Qwest VoIP providers as a replacement for Qwest basic exchange service.

31. Wholesale VoIP providers, such as 360 Networks and Level 3, are promoting the widespread availability of VoIP-based services. 360 Networks introduced its *VoIP360*sm service on September 11, 2006, which it explained was "designed to enable cable operators, ISP's, CLECs, wireless broadband and other service providers to quickly and cost effectively enter the VoIP market and provide IP-based voice services to their residential and business subscribers."⁵⁴ Level 3 offers its Level 3® VoIP Enhanced

⁵⁴ See: <http://www.360networks.com/news.asp?PRID=1>, visited 2-19-09

Local service, which it advertises as a “primary line replacement service,” to companies operating their own Class 5 switches.⁵⁵ Level 3 states that:

The Level 3[®] VoIP Enhanced Local service enables companies operating their own Class 5 switches to launch IP-based local and long-distance communications to residential and business customers using broadband connections. This solution enables a quick-to-market, cost-effective and high-quality VoIP primary-line replacement service.⁵⁶

Both 360 Networks and Level 3 have network facilities in the Phoenix MSA.⁵⁷ Finally, it should be noted that the VoIP market is very dynamic; the preceding discussion provides only a snapshot of VoIP-related services available in the Phoenix MSA and is not intended to represent the full range of such alternatives.

III. COMPETITION IN THE BUSINESS MARKET

32. Qwest is experiencing intense competition in the business market, for small, medium and enterprise business customers. As I will describe, Cox has become a major player in the business market, and traditional CLECs, including AT&T, Integra, XO and many others compete with Qwest for all types of business customers in the Phoenix MSA, using both circuit-switched and VoIP technologies. As I noted earlier, CLECs are lightly regulated and intermodal competitors are typically subject to little or no regulation. Since these competitors are under no obligation to report customer in-service data, especially at the MSA level, Qwest is not able to obtain a *precise* measurement of

⁵⁵ See: <http://www.level3.com/index.cfm?pageID=111>, visited 2-19-09.

⁵⁶ *Id.*

⁵⁷ See: <http://www.360networks.com/default.asp?ID=13> and <http://www.level3.com/index.cfm?pageID=130>, both sites visited 2-19-09.

competitor “shares.” While Qwest is able to identify the level of wholesale services purchased by CLECs from Qwest, it does not have the ability to precisely measure the facilities-based lines and services provided by carriers that do not purchase wholesale services from Qwest.⁵⁸

33. Qwest requested the research firm Harte-Hanks to provide business market share data for the Phoenix MSA so that Qwest could quantify the level of competition in the small, medium and enterprise business market. Harte-Hanks conducted extensive interviews with over 1,500 business customers in the Phoenix MSA to determine what telecommunications services the customers are purchasing, and which carrier(s) the customers are purchasing the services from. In the interviews, each customer was asked to identify their *primary* telecommunications provider.⁵⁹ As depicted in Confidential Exhibit 6, Harte-Hanks found that for businesses with 5 to 19 employees, Qwest was the primary carrier for ***begin confidential*** ***end confidential*** of business locations; for businesses with 20 to 249 employees, Qwest was the primary carrier for ***begin confidential*** ***end confidential*** of business locations, and for businesses with 250 or more employees, Qwest was the primary carrier for ***begin confidential*** ***end confidential*** of business locations.

A. Cable-based Competition.

34. While Cox is a major competitor in the residential market, it also competes vigorously with Qwest in the business market, providing a broad range of business

⁵⁸ As noted in Qwest’s Petition, it is important that the Commission seek actual business in-service access line data not only from Cox, but from other CLECs that offer business services the Phoenix MSA.

⁵⁹ Some enterprise customers purchase services from more than one provider. Harte-Hanks asked each customer to identify the primary carrier that provides the bulk of the telecommunications services to the customer.

products to small business customers of all sizes in the Phoenix MSA.⁶⁰ Cox offers voice telephone service, digital trunks, Centrex service, long distance and “toll free” services, private line service (DS1, DS3 and OC3 to OC192), transparent LAN service, virtual private network service and business video service.⁶¹ In fact, Cox has established a separate marketing division, Cox Business Services, focused specifically on the small, medium and Enterprise business market segments.⁶² The following passage from the Cox Business web site describes Cox’s presence in the business market:

Cox Business is a facilities-based provider of advanced voice, data and video products and services to more than 200,000 business customers in industries ranging from healthcare and hospitality to government and education. The backbone of our capability as a communications provider is our self-owned and self-maintained nationwide IP network. Thousands of miles of fiber-optic cable make up the Cox system, designed with self-healing, fault-tolerant SONET architecture for enhanced dependability. And with our state-of-the-art Network Operations Centers monitoring the Cox network on a 24/7 basis, you’re assured of consistent, reliable voice, data and video services for your business when you need them most.

Cox Business continued to expand into new markets throughout the nation, and by 2003 the company celebrated its 100,000th customer location. Today, Cox offers a full suite of voice, data and video services for small, medium and large businesses as well as for government and education in more than 36 markets, from California to New England.⁶³

Cox announced in June 2008 that it led “all providers of small and midsize business data solutions in customer satisfaction, according to the J.D. Power and Associates 2008 Major Provider Business Telecommunications Study. . .”⁶⁴ In this same press release, Cox Business explains that it provides “a full portfolio of voice, data and video services

⁶⁰ See: http://www.coxbusiness.com/systems/az_phoenix/index.html, visited 1-27-09

⁶¹ See: <http://www.cox.com/arizona/business/services.asp>, visited 1-27-09.

⁶² See: <http://www.coxbusiness.com/index.html>, visited 1-27-09.

⁶³ See: <http://www.coxbusiness.com/aboutus/index.html>, visited 1-27-09.

⁶⁴ Press Release, 6-26-08, see: <http://www.coxbusiness.com/pressroom/pressreleases/2008-0626.html>.

to more than 240,000 business customers in Cox markets across the U.S., including small businesses, multi-location enterprises, regional healthcare providers and federal, state and local government organizations.”⁶⁵ It is also noteworthy that Cox was selected as the telecommunications vendor for the 2008 Super Bowl in Phoenix, and provided “approximately 800 phone lines, up to 200 high speed Internet connections and cable TV” for this event.⁶⁶

35. Cox provides telecommunications services to many small and medium-size businesses utilizing its coaxial network infrastructure, and utilizes its fiber network infrastructure to serve medium to large, enterprise and governmental customers. It is a common misperception that Cox cannot use its coaxial network to provide T-1 based services (e.g., DS1 service). In fact, Cox’s current website contains references to technologies available currently which enable it to offer T-1 services over existing coaxial cable networks:

We’re taking bits in and using an inverse muxing functionality in the upstream to get the data into the bottom side of the spectrum, which is typically too noisy to be useful,” says Paul Connolly, vice president and general manager of S-A’s emerging business division. Because BroadLAN is designed for T-1 traffic, operators can use it to go after a significant chunk of the overall revenue coming out of the commercial services sector. “This allows the operator to target the sweet spot of that market, which is the T-1 interface. It uses the cable plant, so cost of service for that customer is already low,” Connolly says. For example, if an operator already has coax in a school to support a video feed, the operator can offer T-1 services there by dropping in CPE in the premise and marrying it to the BroadLAN headend component, and do so without any amplifier, node or passive network element changes.⁶⁷

⁶⁵ *Id.*

⁶⁶ Press Release, 1-15-08, see: <http://www.cox.com/arizona/press/1080115.asp>. Cox cites in this press release to the “18,000 mile hybrid fiber coaxial cable network throughout Phoenix and Southern Arizona” which provides homes and businesses with digital television, high speed Internet, home networking, high-definition television and digital telephone service over its nationwide IP network, as well as its “integrated wireless services in partnership with Sprint.”

⁶⁷ Press Release; see: <http://www.coxbusiness.com/pressroom/recentmedia/04-0400-ced.html>

This passage makes it clear that cable operators can provide high capacity (DS1) services over existing coaxial facilities.

B. CLEC Competition.

36. In addition to Cox, there are at least 30 unaffiliated CLECs actively competing with Qwest for business customers in the Phoenix MSA, ranging from national CLECs (e.g., AT&T, Verizon/MCI, XO Communications, Level 3 and tw telecom), to regional CLECs (e.g., Integra,⁶⁸ PAETEC/McLeod, 360 Networks). Of this number, as of December 2008, more than ***begin confidential*** ***end confidential*** CLECs were serving business customers using non-Qwest network facilities,⁶⁹ ***begin confidential*** ***end confidential*** CLECs were serving business customers via the purchase of Qwest Local Services Platform ("QLSP") finished wholesale services and ***begin confidential *** *** end confidential*** were reselling Qwest retail services.⁷⁰

37. CLECs are serving business and governmental customers of virtually all sizes, and as of December 2008, at least one CLEC was providing competitive services in 100% of the Qwest wire centers in the Phoenix MSA.⁷¹ Highly Confidential Exhibit 7 shows Qwest wholesale services purchased by CLECs—including unbundled loops, QLSP and

⁶⁸ Integra has purchased Eschelon, Electric Lightwave and Mountain Telecommunications.

⁶⁹ This includes CLECs that use no Qwest facilities, and CLECs that purchase some UNEs from Qwest to combine with their own network assets.

⁷⁰ Qwest wholesale tracking systems, December 2008.

⁷¹ CLECs purchase Qwest wholesale services in each and every Qwest wire center in the Phoenix MSA as shown in Highly Confidential Exhibit 7.

resale—as of December 2008, segmented by residential and business line categories.⁷² This exhibit shows that Qwest provides over ***begin confidential *** *** end confidential*** equivalent business lines.⁷³ It is important to note that the information shown in Highly Confidential Exhibit 7 excludes access lines served via (1) entirely CLEC-owned network facilities, (2) network facilities leased from non-Qwest providers, and (3) the purchase of Special Access service from Qwest. Therefore, this data represents only a subset of CLEC lines in service in the Phoenix MSA.

38. A significant amount of fiber optic cable has been placed by competitive service providers in the Phoenix MSA, as described below. These facilities allow providers to bypass Qwest facilities, and may be used to provide retail services to business customers and wholesale services to other carriers (as discussed in a later section of this declaration). According to GeoTel,⁷⁴ at least ***begin confidential *** ***end confidential*** miles of fiber, owned by approximately 25 unaffiliated providers,⁷⁵ is now in place in the Phoenix MSA.^{76 77} In addition, competitive fiber is now being used to

⁷² When a CLEC purchases UNE-L or EEL wholesale services, Qwest has no means to identify whether the CLEC is serving a business or residence customer. However, nearly all of the CLECs purchasing UNE-L and EEL focus primarily on serving business customers. Therefore, UNE-L is attributed to the business category.

⁷³ CLECs purchase voice grade loops, DS1 loops and a very few DS3 loops. To estimate active circuits per CLEC-purchased DS1, Qwest analyzed its own use of retail DS1s in the Phoenix MSA and found that, on average, ***begin confidential*** ***end confidential*** circuits, or ***begin confidential*** ***end confidential*** of the 24 DS0 channels were being utilized. Thus, for purposes of this analysis, Qwest conservatively assumes that each DS1 loop is equivalent to 20 utilized circuits (83% utilization). Similarly, Qwest assumes that each DS3 loop is equivalent to 550 utilized circuits (83% utilization).

⁷⁴ GeoTel describes itself as follows: “GeoTel Communications, Inc. is the leading provider of telecommunications infrastructure data in a geographic information system (GIS). GeoTel’s unique business strategy implements and converges the mapping of telecommunications fiber and other telecommunications infrastructure with GIS technologies. These two items integrated into one digital data set gives leverage and insight into the competitive metropolitan fiber optic landscape across America.” See: http://www.cmcstore.com/productcart/pc/viewCat_h.asp?idCategory=66

⁷⁵ Excluding fiber owned by Qwest and Qwest’s affiliates.

⁷⁶ Source: GeoTel, August 2008.

⁷⁷ GeoTel continually updates its data regarding fiber-based competitors and provides updated data approximately every six months. However, GeoTel does not possess complete data regarding each fiber-based competitor, and the data reported here is therefore likely to be understated. For instance, SRP Telecom reports at its current website that it owns 950 fiber route miles in the Phoenix MSA (see <http://www.srpnet.com/telecom/wireline.aspx>), a number significantly higher than the value reported by GeoTel for SRP Telecom.

serve over ***begin confidential*** ***end confidential*** buildings in the Phoenix MSA. Over ***begin confidential*** ***end confidential*** commercial buildings in the Phoenix MSA with over \$1,000 in monthly telecommunications spending are within 1,000 feet of an existing non-Qwest fiber route.⁷⁸ Further, GeoTel found that ***begin confidential*** ***end confidential*** of the total number of commercial buildings generating between \$1,000 and \$5,000 in monthly telecom spending are within 1,000 feet of a competitive fiber route, and ***begin confidential*** ***end confidential*** of the commercial buildings generating over \$5,000 in monthly telecom spending are within 1,000 feet of a competitive fiber route. This means that most “unlit” buildings could be “lit” simply by extending a lateral facility less than 1,000 feet from a fiber ring.

39. Confidential Exhibit 8 contains two maps prepared by GeoTel. The first map provides an overview of the location of competitive fiber and competitive fiber-lit buildings within the greater Phoenix area. The second map provides a “close up” view of the same data for a subset of the MSA where competitive fiber deployment is the most extensive.⁷⁹ It may be readily observed that the Phoenix MSA is very saturated with competitive fiber facilities.

40. I will now turn to a discussion of the major CLECs offering business services in competition with Qwest in the Phoenix MSA. AT&T, the largest telecom company in the U.S., offers a wide range of telecommunications services to small, medium and enterprise business customers in the Phoenix MSA. The company’s website indicates that it

⁷⁸ Source: GeoTel, August 2008.

⁷⁹ Again, while GeoTel continually updates its competitive fiber data, it does not account for all fiber currently in place in the Phoenix MSA and therefore understates the true extent of the competitive fiber that currently exists in the market.

provides solutions designed to meet all the needs of small, medium, large and global businesses and governmental entities (as well as residence customers). AT&T also offers wholesale and wireless services.⁸⁰ AT&T offers service via the purchase of unbundled network elements and QLSP from Qwest, but also uses its own extensive fiber and switching network to offer business services without the use of Qwest facilities. According to GeoTel, AT&T has approximately ***begin confidential*** ***end confidential*** route miles of fiber within the Phoenix MSA.⁸¹

41. Integra—who has acquired Eschelon, Mountain Telecommunications and Electric Lightwave—is now a major player in the Phoenix MSA business market. Integra is a facilities-based CLEC providing a range of services to small, medium and Enterprise business customers, including basic business voice lines, long distance services, T-1 services, voice/data integrated services, features, private line services, internet access, etc.⁸² Integra describes itself as follows:

Integra Telecom, Inc. is a facilities-based, integrated communications carrier, dedicated to providing a better choice for businesses in eleven western states. It owns and operates a best-in-class carrier network. . . In contrast to companies that simply resell services from the monopoly Regional Bell Operating Companies (RBOC), Integra Telecom owns and operates its own network offering local dial tone, domestic and international long distance, high speed Internet and data services (including digital subscriber line or DSL), voice messaging, and numerous ancillary services designed to support the communications needs of businesses. . .⁸³

⁸⁰ <http://att.sbc.com/gen/landing-pages?pid=3308>, visited 1-27-09.

⁸¹ Source: GeoTel, August 2008.

⁸² See: <http://www.integratelecom.com/products/>, visited 1-27-09.

⁸³ See: <http://www.integratelecom.com/about/>, visited 1-27-09.

Integra announced on August 27, 2008 that it had been named by *Inc.* as “one of America’s 5,000 fastest-growing private companies” and that it had achieved revenue growth of more than 240 percent between 2004 and 2007.⁸⁴ In this press release, Integra further described its “best-in-class” network as a “fiber-optic network comprising metropolitan access networks, a nationally acclaimed tier one Internet and data network, and a 4,700-mile high-speed long haul network.”⁸⁵ Integra touts the significant synergies and cost reductions that will result from its purchase of Eschelon in markets such as Phoenix:

The purchase will reduce both companies' costs by nearly 80 percent because Eschelon will use Integra's fiber network instead of leasing facilities and telephone lines from other carriers, Integra officials said. Following the transaction, Integra will hold about 30 percent of the businesses in the metropolitan areas it operates throughout the 11 states it will serve.⁸⁶

According to GeoTel’s competitive fiber tracking data, Integra (with its Electric Lightwave facilities) now owns approximately ***begin confidential*** ***end confidential*** miles of fiber within Qwest wire center boundaries in the Phoenix MSA.⁸⁷

42. On October 17, 2006, Level 3 announced its acquisition of Broadwing Corporation, a CLEC serving small, medium and Enterprise business customers in a variety of U.S. markets, including the Phoenix MSA. Until this acquisition, Level 3 was primarily a

⁸⁴ Integra Press Release, 8-28-08, See: http://www.integramn.com/about/news/news_releases/2008/2008-08-28_integra_release.pdf

⁸⁵ *Id.*

⁸⁶ Phoenix Business Journal, 3-19-07, See: <http://phoenix.bizjournals.com/phoenix/stories/2007/03/19/daily14.html>

⁸⁷ Source: GeoTel, August 2008.

major “carriers’ carrier” offering wholesale telecom services to other communications providers. However, in discussing its Broadwing acquisition, Level 3 stated:

The acquisition of Broadwing is consistent with both the Level 3 wholesale market strategy as well as our more recent entry into the enterprise market. We believe the combination of Level 3 and Broadwing will create value for our investors through the elimination of duplicative network and operating costs, the addition of a solid revenue base, and a further strengthening of our financial position. Broadwing has made great strides with the national enterprise customers as a result of their strong product portfolio and national sales teams. This creates an exciting opportunity for us to leverage both of these capabilities to accelerate the growth of Level 3’s Business Markets Group.⁸⁸

Level 3 announced the completion of this acquisition in early January 2007. Level 3 has established a specific marketing organization, the Level 3 Business Markets Group, to focus specifically on serving the small, medium and Enterprise business markets--a strategy that has been enhanced through Level 3’s acquisition of Broadwing. As of September 30, 2008, 25% of Level 3’s revenues were derived from its business markets group.⁸⁹ According to its “fact sheet” for fourth quarter 2008, Level 3’s fiber network now includes 51,000 intercity route miles and 26,000 metropolitan route miles in its 125 city markets (including Phoenix).⁹⁰ GeoTel’s data shows that Level 3 has over ***begin confidential*** ***end confidential*** fiber route miles in Qwest wire centers in the Phoenix MSA.⁹¹

⁸⁸ Level Three Press release, October 17, 2006, see: <http://www.level3.com/index.cfm?pageID=253&PR=http://level3.mediaroom.com/index.php?s=43&item=94>

⁸⁹ Level 3 10Q, Third Quarter, 2008, see: <http://vlt.client.shareholder.com/sec.cfm?DocType=Annual,Quarterly>

⁹⁰ See: http://files.shareholder.com/downloads/LVLT/562218275x0x272934/6E198C6D-D3A4-43A0-A7DC-67EF90910FB7/4Q08_Quarterly_Fact_Sheet_Web.pdf, visited 2-24-09.

⁹¹ Source: GeoTel, August 2008.

43. tw telecom (which changed its name from Time Warner Telecom on July 1, 2008) is a facilities-based CLEC operating in 75 markets encompassing 30 states, including Phoenix and Tucson.⁹² tw telecom focuses on the small, medium and Enterprise business markets, and offers a wide range of telecommunications services including business voice service, dedicated high capacity services, digital trunks, ISDN, long distance, dedicated internet access, LAN services, MPLS IP VPN service, etc. In announcing results for the third Quarter of 2008, tw telecom reported that it had grown enterprise business revenue 25 consecutive quarters including 2% sequentially and 11% year over year,⁹³ a very strong performance in the face of the challenging economic climate. As described later in my declaration, tw telecom also provides wholesale telecommunications service to other carriers in a number of markets, including Phoenix.⁹⁴ tw telecom reported that its total metro and regional fiber route miles (which include its network in the Phoenix MSA) had increased from 25,441 in September 2007 to 26,399 in September 2008, and that its total number of fiber-connected buildings is now 9,109, up from 8,109 in June 2007.⁹⁵ GeoTel's data shows that tw telecom now owns over ***begin confidential *** *** end confidential*** miles of fiber in Qwest's wire centers in the Phoenix MSA.⁹⁶

44. XO Communications is an active participant in the Phoenix telecommunications market, serving customers through two primary business units: XO Business Services and XO Carrier Services. XO describes its Business Services unit as follows:

⁹² See: http://www.twtelecom.com/about_us/networks.html, visited 1-20-09

⁹³ *tw telecom Third Quarter 2008 Earnings Release*, November 5, 2008. See: http://www.twtelecom.com/Documents/Announcements/News/2008/TWTC_Q3_08_Press_Release.pdf

⁹⁴ See: http://www.twtelecom.com/eust_solutions/eust_seg.html, visited 1-20-09

⁹⁵ *tw telecom Third Quarter 2008 Earnings Release*, November 5, 2008. See: http://www.twtelecom.com/Documents/Announcements/News/2008/TWTC_Q3_08_Press_Release.pdf, p. 12.

⁹⁶ Source: GeoTel, August 2008.

XO® Business Services provides managed services and converged Internet Protocol (IP) network services that combine voice, Internet access, and private data networking for small and medium sized companies, enterprises, national and government accounts.⁹⁷

XO claims that it has over 90,000 customers, including more than 50% of the Fortune 500.⁹⁸ It markets services separately to small/medium business customers and enterprise/government customers. Services offered to small and medium-sized businesses include local and long distance voice service, hi-cap private line services (DS1, DS3), DSL, several VoIP-based services (e.g., XO IP Flex), MPLS IP-VPN services, managed services (e.g., XO One iPBX) and hosting and hosted IP services.⁹⁹ Services offered to XO Enterprise customers include local and long distance services, Ethernet services, hi-cap private line services (DS1 through OCn), converged and IP services (e.g., XO IP Flex) and managed services (e.g., MPLS IP-VPN).¹⁰⁰ In recent years, XO has increasingly focused on the Enterprise market:

XO Communications' enterprise customer base has grown steadily over the past year as a result of the company's increased focus on this customer segment, the expansion of its network, and addition of new IP and high-bandwidth network services for enterprises. In addition, XO Communications has seen increased opportunities in the enterprise market as customers seek alternatives to today's incumbent telecom companies in the wake of industry consolidation. Today, XO Communications serves 50 percent of the Fortune 500 and manages complex and sophisticated networks for some of the nation's largest enterprises.¹⁰¹

⁹⁷ XO Fact Sheet, See: http://www.xo.com/SiteCollectionDocuments/XO_Communications_Fact_Sheet.pdf, visited 2-24-09.

⁹⁸ *Id.*

⁹⁹ See: <http://www.xo.com/smb/Pages/overview.aspx>, visited 2-24-09.

¹⁰⁰ See: <http://www.xo.com/enterprise/Pages/EnterpriseOverview.aspx>, visited 2-24-09.

¹⁰¹ XO Press Release, 10-8-07, see: <http://www.xo.com/about/news/Pages/361.aspx>,

In a recent press release promoting its enhanced Ethernet infrastructure, XO highlighted its “Extensive Nationwide Inter-City and Metro Fiber Networks,” claiming that it has “18,000 route mile inter-city fiber optic network and nearly one million fiber miles of metro networks”¹⁰²

45. In addition, Nextlink, XO’s wireless broadband service division, began offering service in Phoenix in March, 2007.¹⁰³ Nextlink offers a range of broadband wireless private line services, including DS3, OC-3 and OC-12 services to Enterprise and wholesale customers. These offerings compete directly with high capacity services offered by Qwest, and provide “last mile” connectivity to customers.¹⁰⁴

C. VoIP-based Competition

46. Adoption of VoIP by the business sector is on the rise, and most major CLECs (including those described above) are increasingly offering VoIP-based business services. Infonetics Research recently offered the following insight and forecast for the business VoIP market:

While VoIP services are being embraced by consumers worldwide, businesses have been comparatively slower in their adoption due to various roadblocks. This is about to change, though, as technical issues are resolved. For example, many PBX manufacturers have already added SIP trunking interfaces to their equipment, and more recently, they’ve greatly expanded the list of certified service providers, and that’s going to fuel the growth in SIP trunking services. These kinds of developments will boost the overall VoIP business services segment for years to come.¹⁰⁵

¹⁰² XO Press Release, 8-18-08, see: <http://www.xo.com/about/news/Pages/407.aspx>.

¹⁰³ XO Press Release, 3-19-07, see: <http://www.nextlink.com/xo-communications-launches-broadband-wireless-services-in-phoenix.html>

¹⁰⁴ See: http://www.nextlink.com/livefiles/ServiceGroups/1/Service_Providers.pdf, visited 2-24-09.

¹⁰⁵ Press Release, August 13, 2008. See: <http://www.infonetics.com/pr/2008/ms08.vip.nr.asp>

Infonetics Research found that worldwide revenue from hosted VoIP and managed IP PBX services increased by 52% in 2007 after having surged by 66% in 2006, and predicted that it would grow “in the strong double-digits” through at least 2011. The firm also expects the business customer (vs. consumer) share of worldwide hosted VoIP service revenue to increase from 26% in 2007 to 41% in 2011.¹⁰⁶ Network World expressed a similar view in March 2008 when it published the results of a study to determine “what midsized and large organizations [were] planning for VoIP over the next few years.” Network World reported that:

More than seven out of 10 respondents expect VoIP to be important or ‘extremely important’ to their organizations by late 2008. More than three out of five organizations say they now view deploying unified communications at the end of 2008 as very important or ‘extremely important.’”¹⁰⁷

47. Nearly all of the major providers competing with Qwest for business customers in the Phoenix MSA offer VoIP-based services. For example, McLeod/PAETEC advises potential business customers – whether they manage one legacy telephony system or multiple systems – that they “can choose flexible and cost effective VoIP solutions that will seamlessly merge [their] voice telephony and data technology onto a single network, providing simplicity and reducing costs.” It offers VoIP on either a Hosted IP Telephony basis or via a Dynamic IP Service that integrates with the customer’s existing equipment.¹⁰⁸ As noted above, XO also offers two VoIP products for business, including

¹⁰⁶ *Id.*

¹⁰⁷ *Network World*, 3-6-08, See: <http://www.networkworld.com/cgi-bin/mailto/x.cgi?pagetosend=/export/home/httpd/htdocs/newsletters/gwm/2008/0303msg2.html&pagename=/newsletters/gwm/2008/0303msg2.html&pageurl=http://www.networkworld.com/newsletters/gwm/2008/0303msg2.html&site=convergencevoip>.

¹⁰⁸ See: http://www.paetec.com/voice/voip_overview.html, visited 1-20-09.

IP Flex and XO® SIP Service. IP Flex utilizes existing phone systems or PBXs in conjunction with ISDN-PRI, Digital Trunk, or Analog Line connectivity, while XO® SIP Service is a converged VoIP solution that provides direct IP access to the XO network for voice and data communications.¹⁰⁹

48. Similarly, Global Crossing offers enterprise customers “fully managed, converged IP solutions designed to seamlessly combine data, voice, video and multimedia applications on a single IP-based platform,”¹¹⁰ and Level 3 claims that its Level 3® Enterprise IP Trunking service “allows businesses with IP PBXs to extend the benefits of Voice over IP (VoIP) convergence from their LAN to the WAN and the Public Switched Telephone Network (PSTN).” Level 3 goes on to proclaim that its Level 3® Enterprise IP Trunking service “virtually eliminates the need for expensive TDM gateways and trunks.”¹¹¹ In addition, AT&T offers network-based VoIP solutions and premises-based solutions¹¹² and Verizon offers a variety of VoIP solutions that can be “mixed and matched for a total solution that complements [the customer’s] existing technology” so that customers “can migrate to VoIP at [their] own pace with the peace of mind that comes from integrated, state-of-the-art security and professional expertise.”¹¹³ Clearly, VoIP is not just the technology of the future for the business market segment. Business customers are demanding VoIP solutions today, and business service providers are meeting those demands in the Phoenix MSA.

¹⁰⁹ See: <http://www.xo.com/smb/voip/Pages/overview.aspx>, visited 1-20-09.

¹¹⁰ See: http://www.globalcrossing.com/enterprise/enterprise_ip_solutions_landing.aspx, , visited 2-24-09.

¹¹¹ See: <http://www.level3.com/index.cfm?pageID=110>, visited 1-27-09.

¹¹² See: http://www.business.att.com/enterprise/Family/eb_voip/network_based_voip/ and http://www.business.att.com/enterprise/Family/eb_voip/premises_based_voip/#Overview, visited 1-27-09.

¹¹³ See: <http://www.verizonbusiness.com/us/products/voip/>, visited 1-27-09.

IV. COMPETITION IN THE WHOLESALE MARKET

49. In addition to the many competitors described earlier in this declaration that are vying for *retail* customers in the Phoenix MSA, there is also a growing class of carriers that offer *wholesale* services to other communications carriers as a direct alternative to Qwest wholesale services. These carriers—many of whom have their own fiber networks in the Phoenix MSA—offer dark fiber, wholesale carrier access, wholesale transport, end user connectivity and finished telecommunications services for use by other telecom providers. In fact, AT&T, Covad, Cox Arizona, Eschelon/Integra/Electric Lightwave, Global Crossing, Level 3, McLeodUSA/PAETEC, Time Warner Telecom of Arizona (tw telecom), Verizon/MCI and XO Communications have all self-reported to the FCC that they are offering “carrier’s carrier” services to other telecommunications service providers.¹¹⁴

50. Since inter-carrier services are typically provided on a contractual basis under confidential terms and conditions, specific details of carrier-to-carrier arrangements are often difficult to obtain from public information. However, the wholesale offerings of many carriers that operate in the Phoenix MSA are presented in detail on their web sites and in marketing brochures. Often, these carriers market wholesale services via a separate market unit or distribution channel that is dedicated to serving the needs of other carriers. Thus, Qwest is able to identify the specific wholesale carrier offerings that are available from these carriers in the Phoenix MSA. In addition, it must be emphasized that many wholesale providers own fiber facilities in the Phoenix MSA, and these providers actively market the use of these networks to other carriers. In many cases,

¹¹⁴ *Telecommunications Provider Locator*, Industry Analysis & Technology Division, Wireline Competition Bureau, Table 3, September, 2007. See: http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-276470A1.pdf.

these fiber networks provide “last mile” access to buildings in the Phoenix MSA, allowing the purchaser to completely bypass Qwest facilities. A brief discussion of the wholesale offerings of a representative subset of these carriers follows.

51. Cox Communications now offers its “Carrier Access” loop and transport services to other carriers in the Phoenix MSA. These services—offered over Cox’s own network—represent a direct substitute for Qwest unbundled network elements and carrier access services. Cox states that its Carrier Access services allow carriers to:

Choose from multiple bandwidths to connect your network to your customer’s location, to provide connectivity between your POPs, or to connect you with other serving wire centers. You may also select the right interconnection bandwidth you need to meet your capacity requirements for your demand set. You’ll be sure to get the right fit every time.

Built on our own fiber-based SONET self-healing network, Cox Carrier Access service gives you high-capacity communications that set the standard for high-speed and high-quality digital transmissions at a cost-effective price.¹¹⁵

On its website, Cox describes the carrier services that are available in the Phoenix MSA:¹¹⁶

¹¹⁵ See: <http://www.coxbusiness.com/products/other/carrierservices.html>, visited 1-29-09.

¹¹⁶ See: http://www.coxbusiness.com/pdfs/cox_carrier.pdf, visited 1-29-09.

We can help you choose the Cox Carrier Access service level that best meets your communications requirements.

Service	Features
Cox DS-1 Customer End Loop	1.544 Mbps (DS-1) digital circuit Super Frame (SF) or Extended Super Frame (ESF) AMI or B8ZS line coding
Cox DS-3 Customer End Loop	44.736 Mbps digital circuit
Cox OC-3 Customer End Loop	155.62 Mbps optical circuit
Cox OC-12 Customer End Loop or Carrier Interconnection	622.08 Mbps optical circuit
Cox OC-48 Customer End Loop or Carrier Interconnection	2.488 Gbps optical circuit
Cox OC-192 Customer End Loop or Carrier Interconnection	9.952 Gbps optical circuit

Standard features that enhance your Carrier Access service:

Optional Service	Features
Configurations Supported	Channelized or full clear channel configurations available Multiplexing available at one or both ends DS-1s and DS-3s can be fanned out to multiple destinations
Customer Interfaces Available	Variety of hand-off interfaces available, including RJ45, BNC, RS232 and FC, SC and ST optical connectors

It is critical to understand that Cox is providing a “last mile” loop option as well as interoffice transport option to carriers. Thus, other carriers can use the Cox network to completely bypass the Qwest network, connecting individual buildings to a point of presence (“POP”) or other carrier location in the Phoenix MSA.

52. SRP Telecom (“SRP”), based in Tempe, has a very extensive fiber network in the Phoenix MSA that is used to provide dark fiber and carrier access services to other providers. SRP is a subsidiary of Salt River Project, which is a major electric utility provider that has served the Phoenix metropolitan area for over 100 years. It has utilized its preexisting utility rights of way to extend the reach of its extensive fiber optic network within the Phoenix MSA. SRP Telecom’s website provides a map that defines the scope

of its 950 route mile fiber network in the greater Phoenix metropolitan area. This non-confidential fiber route map, which also shows many on-net or near on-net buildings and central offices, is provided as Exhibit 9.

53. On its website, SRP provides a detailed description of the scope and capabilities of its competitive telecommunications network:

SRP Telecom is a carrier-neutral provider of telecommunications infrastructure products and services to Wireline and Wireless carriers alike, as well as to enterprise customers. Our fiber optic and cell site assets are concentrated in the Phoenix metropolitan area, providing ready access to one of the most dynamic markets in the country. We provide solutions to the unique network challenges of the expansive Phoenix marketplace. . . . *Our 2,900-square-mile service territory extends from one end of the Valley of the Sun to another, spanning all or part of 15 cities.* This is unparalleled market reach by a dark fiber or cell site provider. Our 950-route mile fiber network allows us to be extremely flexible in designing fiber solutions to reach your customers. . . . We literally have thousands of vertical elements to offer Wireless carriers. . . . And *our transmission and distribution lines reach just about every corner of the Phoenix metropolitan area.*¹¹⁷ (emphasis added)

SRP offers an extensive array of services to carrier customers over this extensive fiber network. Regarding its wireline services, SRP states:

SRP Telecom offers carriers dark fiber – the fundamental ingredient for broadband networks that support Synchronous Optical Network (SONET), Wave Division Multiplexing (WDM), Ethernet, VOIP, and any foreseeable new optical technology. We operate the *largest and most geographically pervasive competitive fiber network in the Phoenix metropolitan area.* We are the market's densest metropolitan area network, and one of the densest in the nation . . . We've delivered solutions ranging from a 150-plus route mile, multimode metropolitan area private dark fiber network, to a single 500 foot data center building entrance. . . . Because our network is deployed and co-located along with

¹¹⁷ See: <http://www.srpnet.com/telecom/Default.aspx>, visited 1-29-09.

our electric transmission system, *most of your customers are customers of our electric business; as such, they're in close proximity to our fiber network.* Our fiber network serves *50 on-net commercial buildings* and business campuses, including the facilities of some of the biggest names in corporate America. Our network also reaches *20 central offices, switches and other carrier points-of-presence.* These serve as a fundamental access and transport network for some of our carrier customers. By coordinating new fiber build-out with our electric system expansion, *we extend our network cost-effectively to new commercial buildings and customers – usually well ahead of other fiber providers.* . . . Our network is within economic reach of many of the globally prominent businesses located in metropolitan Phoenix.¹¹⁸ (emphasis added)

Further, SRP Telecom publicly reports that it is providing fiber services to numerous carrier locations, including carrier hotels, in locations such as Chandler, Gilbert, Mesa, Phoenix and Tempe.¹¹⁹ It also has over 20 On-Net central offices and Carrier POPs and 50 On-Net Buildings, with 14 Business Parks Near its network.¹²⁰ Finally, SRP indicates that it serves enterprise customers as well as carriers. It states:

Our greatest strength may be our ability to reach enterprise customers. Since our network is deployed and collocated along with our electric transmission system, your prospects are in close proximity to our fiber network. We can provide a full end-to-end solution including backbone, laterals, customer premises entrances and terminating facilities. Or we can unbundle our solutions, if necessary, letting you handle building entrances, for example, or providing point-to-point backbone fiber segments to complement yours. We offer terms ranging from 12 months to 20 years in monthly, quarterly, annual or lump sum payments.¹²¹

There is no question that SRP provides a very viable option for carriers that seek an alternative access solution to the use of Qwest's network in the Phoenix MSA. SRP is actively marketing services to these carriers, and can provide comprehensive "last mile"

¹¹⁸ See: <http://www.srpnet.com/telecom/wireline.aspx>, visited 1-29-09.

¹¹⁹ See: <http://www.srpnet.com/telecom/locations/locpage.aspx?type=Carrier>, visited 1-29-09.

¹²⁰ See: <http://www.srpnet.com/telecom/pdfx/wireline.pdf>, visited 1-29-09.

¹²¹ See: <http://www.srpnet.com/telecom/pdfx/wireline.pdf>, visited 1-29-09.

solutions to connect commercial buildings, POPs, switches, collocations and other carrier locations throughout the Phoenix area—all without the use of Qwest facilities.

54. AGL Networks (“AGL”), which owns and operates fiber networks in Phoenix and Atlanta, bills itself as providing “exceptional value to its customers by offering the *critical last mile connectivity between telecommunications service providers and business locations.*”¹²² (emphasis added) Specifically, according to its website, AGL:

- Owns, operates and maintains a 225-mile fiber network in the metro Phoenix area
- Provides high capacity dark fiber transport services to Institutional wireline and wireless carriers as well as enterprise companies, government, health care and educational institutions
- Enables last-mile connectivity to major office buildings, COLOs, POPs, ILEC central offices and carrier hotels
- Provides fiber and conduit leasing (IRU's) or asset sales, network maintenance and construction services to its customers.¹²³

AGL’s 225-mile Phoenix network, which is depicted in the map included as Exhibit 10, covers the Phoenix central business district, midtown, I-17 corridor, airport, South Tempe and Chandler areas.¹²⁴ AGL’s on-net building list for Phoenix, which I have included as Exhibit 11, names 64 specific in-service or pending building locations in the Phoenix area.¹²⁵ AGL states that “Our pre-spliced connections and Fiber Termination Panels (FTP’s) in our ever growing list of on-net buildings give our customers the ability to rapidly deploy bandwidth upgrades to meet existing and future requirements.” AGL continues: “If you’re searching for dark fiber — and a competitive advantage in your

¹²² See: <http://www.aglnetworks.com/OurCompany/Company-Overview.aspx>, visited 1-30-09.

¹²³ *Id.*

¹²⁴ *Id.* See also <http://www.aglnetworks.com/OurNetworks/Phoenix-Network.aspx> for AGL Networks’ Phoenix fiber map.

¹²⁵ See: http://www.aglnetworks.com/docs/OnNetBuildingList_Phoenix.pdf, visited 1-30-09.

telecommunications growth initiatives — grow with AGL Networks.”¹²⁶ AGL describes its customers as:

- Local, regional, national telecom companies
- Data Centers and Telecom Hotels
- Major corporations
- Cable and other ISPs
- Companies with applications for data, call centers and disaster recovery.¹²⁷

AGL states that its established networks allow these customers “to lease or purchase dark fiber in various strand counts in rings or point to point configuration with a design specific to [their] target sites. [Customers] can add additional fiber infrastructure to fit [their] growing needs on [their] schedule, today or tomorrow as [they] grow.”¹²⁸ Like SRP Telecom, AGL Networks provides “last mile” connectivity and transport options that allow carriers to bypass Qwest’s network in the Phoenix MSA.

55. As discussed earlier in this declaration, Integra acquired Electric Lightwave (“ELI”) in 2006. Since ELI has a large presence—with its own fiber network—in the Phoenix MSA, this acquisition allowed Integra to become a major player in the Phoenix market, for both retail and wholesale services. In an interview with the *Portland Business Journal*, Integra CEO Dudley Slater outlined the benefits of the ELI acquisition:

Integra, which has been leasing optic-fiber capacity from ELI’s network, will enjoy some significant cost savings from owning ELI, and will gain what Slater called “a list of blue-chip [telecom] carriers” that also lease capacity from ELI. Integra has built its own metropolitan fiber networks over the years, but “it’s dwarfed by what ELI brings us.”¹²⁹

¹²⁶ *Id.*

¹²⁷ See: <http://www.aglnetworks.com/OurBusiness/Metropolitan-Optical-Networks.aspx>, visited 1-30-09.

¹²⁸ *Id.*

¹²⁹ *Portland Business Journal*, February 7, 2006. See: <http://portland.bizjournals.com/portland/stories/2006/02/06/daily8.html>

In Integra's announcement of the acquisition, Mr. Slater also highlighted the importance of ELI's metropolitan fiber networks to Integra's future plans:

These robust metropolitan fiber networks will substantially increase our operating strength and provide a meaningful and sustainable competitive advantage over other local carriers that rely exclusively on leasing network from the Bell companies.¹³⁰

Integra markets wholesale services through a separate carrier division, for which it has retained the ELI brand name. The ELI division of Integra *focuses solely on marketing carrier services*. According to the ELI website, "Through Electric Lightwave, carriers gain access to Integra Telecom's 23 metropolitan access networks in eight Western states"¹³¹ which includes Phoenix. While ELI does not provide a local map of its Phoenix network, its long haul network map (included as Exhibit 12) shows—in an admittedly compressed manner—its large Phoenix fiber network. According to GeoTel, Integra/Electric Lightwave now has approximately ***begin confidential*** ***end confidential*** miles of fiber in the Phoenix MSA that can be used to provide retail and wholesale services.¹³² ELI describes itself as follows:

Electric Lightwave carriers gain access to twenty-three metropolitan access networks in eight western states, a nationally acclaimed tier one internet and data network, and high speed long-haul fiber-optic network that interconnects major markets in the West. **Electric Lightwave serves hundreds of carriers** - meeting their needs everyday.¹³³ (emphasis added)

¹³⁰ Integra Press Release, 2-7-06. See: http://www.integratelecom.com/about/news/press_release_articles/Press%20release%20-%20Buys%20Elec%20LW.pdf.

¹³¹ See: <http://www.electricleightwave.com/about/>, visited 1-29-09.

¹³² Source: GeoTel, August 2008.

¹³³ See: <http://www.electricleightwave.com>, visited 1-29-09